

Executive Summary: Department Operations

The Mayor and City Council adopted resolution R-57-2006 in support of government action to reduce global warming pollution and decrease energy dependency. The resolution is modeled after the U.S Conference of Mayors' Climate Protection Agreement, and calls for the city to inventory warming emissions in city operations, set reduction targets and create an action plan. Other actions identified in the resolution address land use, energy efficiency, use of alternative energy, purchasing practices, recycling, education and building practices. Staff has identified two categories for reform that will meet the requirements of the resolution. This section of the plan is focused on reducing greenhouse gas emissions resulting from department operations.

The Planning & Development Department has identified three key areas within this action plan where it can make a significant contribution to achieve the objectives of the Climate Protection Resolution (see Table 1). The contributions are measured in terms of Carbon Dioxide (CO₂) emissions, one of the key gases associated with global warming.

Table 1. Target Greenhouse Gas Reductions

	Current Use	GHG (lbs in CO ₂)	Target Reduction (lbs in CO ₂)
Electricity:	887,497 kw	1,236,793	123,458
Paper:	355 cases	50,415	11,646*
Gasoline:	1,279 gal	24,250	15,432
Total			150,536 lbs of CO₂

** Paper total is a combination of switching to 50% post consumer content (9,339 lbs) and reducing our current usage by 10% over the next year (2,307 lbs).*

By powering down computers at the end of the work day, and by turning off appliances and lights in empty work areas, department employees can prevent 123,458 lbs of CO₂ emissions. The department currently purchases paper that has little or no recycled content. Switching from 100% virgin paper to 50% recycled content will reduce CO₂ emission by 9,339 lbs of CO₂. As the department's trucks are replaced with hybrid vehicles that average 40 or more miles per gallon; the department will reduce yearly gas consumption by 767 gallons, preventing 14,837 lbs of CO₂ from reaching the atmosphere.

By implementing this plan, the Planning & Development Department will reduce CO₂ emissions by 150,536 lbs annually, which is equivalent to:

- *The electrical use of 8.5 households for one year,*
- *Recycling 23 tons of waste recycled instead of depositing it in a landfill,*
- *Consuming 7,777 gallons of gasoline,*
- *159 barrels of oil, and*
- *2,850 propane cylinders used for home barbeques ¹.*

The following actions have been identified to achieve the above mentioned targets:

◇ ***Action Item 1: Reduce Paper Consumption.***

The Planning Department uses 355 cases (17,720 lbs) ² of paper in one year. By sharing printed documents, viewing documents online and printing on both sides of the page, consumption can be reduced by 10%. Implementing policy to increase use of paper with recycled content will help preserve forests, generate less pollution during manufacturing, and reduce solid waste in landfills.

◇ ***Action Item 2: Conserve Electricity.***

Annually, the Development Services Center (DSC) uses 887,497 kilowatt hours ³ of electricity. By regulating thermostats, turning off electrical devices, and installing smart devices, the Planning & Development Department has set a target to reduce over-all electrical usage by 10%. This will prevent 123,459 lbs of greenhouse gases from entering the atmosphere annually.

◇ ***Action Item 3: Increase Our Recycling Efforts.***

97.6% of the employees that responded to a recent survey ⁴ said they were willing to recycle, but 87% said the current program is “fair to poor.” This plan recommends improving convenience for employees by providing additional bins and reminders. In 2003, 54 billion cans were recycled nationally, saving the energy equivalent of 15 million barrels of crude oil, or America’s entire gas consumption for one day.

◇ ***Action Item 4: Increase Vehicle Efficiency.***

In 2006, three of the department’s trucks used 1,279 gallons of gasoline to drive 20,482 miles, ⁵ for a fuel efficiency of 16 miles per gallon. As the department continues to replace these gas hogs with hybrid vehicles, efficiency will increase dramatically. (Most hybrids average 40 + miles to the gallon.)

¹ www.usctcgateway.gov/tool

² P&D Billing Report FY 2006

³ DSC utility charges – FY 2006

⁴ Survey of P&D employees, sent May 22, 2007

⁵ Planning & Development Fueling System Report 07/01/05 – 05/09/07

◇ **Action Item 5: Increase participation in Club Ride.**

A recent survey of Planning & Development staff⁶ reveals low participation in the Club Ride program, about five percent of employees. This plan recommends increasing participation in the Club Ride program by identifying willing participants and helping those individuals to find co-workers in their area. Ten people carpooling only four days per month, for an entire year; will prevent the production of 4,034 lbs of carbon dioxide.

⁶ Survey sent (to all P&D staff) June 27, 2007

Planning & Development Department

The Planning & Development Department is actively working to align its day-to-day operations to achieve the goals established by the Mayor and City Council in R-57-2006, "Resolution in Support of Governmental Action to Reduce Global Warming Pollution." This Plan is designed to increase employee participation by adhering to sustainable policies and procedures. Staff has identified two categories for reform: (1) Departmental Operations, and (2) Business Practices (Master Plan documents and Zoning Code). This section of the plan addresses department Operations.

Departmental Operations

"Departmental Operations" is an internal evaluation of Planning & Development's practices and procedures. This plan makes it a priority to align the day to day operations of the department with the City's Strategic Plan and the provisions of R-57-2006.

CELEBRATE Program

City Employees Lowering Energy Cost By Recycling And Tracking Efficiency (CELEBRATE) is a committee made up of Planning & Development staff members. This committee meets on a regular basis (approximately every other week) to evaluate the department's policies and procedures and look for ways to become more sustainable. This plan is the foundation for the department's sustainability program.

Problem Definition

"Waste is a symptom of an inefficient process. Preventing waste increases efficiency. Increasing efficiency increases profits. Theoretically speaking, it is better to prevent the generation of waste than it is to recycle. You can only recycle waste that you have failed to prevent. So, place your emphasis on reducing waste if you can, then recycle the waste that you must generate."⁷

In order to ascertain workable benchmarks, CELEBRATE contacted various city departments to collect the data needed to establish benchmarks.

After evaluating data availability and over-all impact on greenhouse gas emissions, CELEBRATE focused primarily on five specific areas: paper consumption, energy consumption, vehicle performance & fuel economy, the Club Ride program and recycling efforts. Efficiency in these areas could be significantly improved and progress could be measured annually.

⁷ California Integrated Waste Management Board. <http://www.ciwmb.ca.gov/bizwaste/default.htm>

Action #1 – Paper Consumption (Planning & Development)

Planning & Development (for Fiscal year 2006) used approximately 17,720 lbs. of paper. This figure includes paper for everyday use by employees, for printing meeting agendas and reports, and the standard paper consumed by graphics for publications and copies.

Current office procedures and policies are not aligned with reducing paper waste. Printers default to one-sided copies, several drafts of a document are printed instead of sharing copies, and there is no system in place to monitor and assess paper consumption by individuals. As a standard practice, paper without recycled content is ordered for everyday use.⁸

Cost comparison:

The everyday paper currently used for copying/printing costs the Planning Department \$28.30 per case.⁹ (Case =10 reams of 500 sheets.) This paper does not contain recycled material and is not environmentally rated. Corporate Express offers several different kinds of recycled paper. The closest cost per case to what the department is currently paying has a recycled paper content of “50% Recycled Paper” which is certified to contain at least 50% recycled content. This paper is part of the EPA’s continuing effort to promote the use of materials recovered from solid waste, and meets or exceeds the Green Seal standards. The paper costs \$31.60 per case,¹⁰ or \$3.30 more per case than what is currently used. The cost difference for the 355 cases purchased in FY 2006 would have been \$1171.50.

Table 2. Environmental Benefits – Changing to 50% Post Consumer Content¹¹

	0% Post Consumer (Baseline)	50% Post Consumer (Target)	Difference (Baseline - Target)
Wood Use	31 tons	15 tons	15 tons
Total Energy	340 million BTUs	266 million BTUs	74 million BTUs
Greenhouse Gases	50,415 lbs CO ₂ equiv.	41,076 lbs in CO ₂ equiv.	9,339 lbs CO ₂ equiv.
Wastewater	169,006 gallons	130,243 gallons	38,763 gallons
Solid Waste	20,186 lbs	15,208 lbs	4,978 lbs

Benefits to reducing paper consumption.

Most paper is manufactured from the harvesting of virgin forests. Clear cutting of forests destroys ecosystems, degrades water quality, facilitates erosion, and contributes to species extinction. Paper production contributes to significant air and water pollution. A key element in a commitment to

⁸ Paper Supply: Based on evaluation of blanket purchase/payment orders from the Finance Department for 2006.

⁹ Corporate Express Website - 7/6/07

¹⁰ Corporate Express Website - 7/6/07

¹¹ www.environmentaldefense.org/papercalculator/process.cfm

environmentally sustainable practices involves setting goals for recycled content in paper products.¹² Combining actions to reduce paper consumption with purchasing practices that favor recycled paper can dramatically reduce the Department's greenhouse gas emissions. If implemented properly, the savings from reduced paper consumption will equal or exceed the higher cost of purchasing recycled paper.

Table 3. Preventing CO₂ – 10% Reduction in Usage

<u>Current Use</u>	<u>10% Reduction (over 1 yr)</u>	<u>Prevention</u>
3,550 Reams	355 reams =	2,307 lbs of CO ₂

Formula: 1 ream = 6.5 lbs of CO₂ in the Industrialize Process¹³

$$335 \text{ reams} \times 6.5 \text{ lbs of CO}_2 = 2,307 \text{ lbs of CO}_2 \text{ (PREVENTED)}$$

Goal 1: *Reduce paper consumption by 10% in program year one.*

Objective 1.1: *Reduce greenhouse gas emissions resulting from consumption of paper.*

Policy 1.1.1: *Set all capable printers to double-sided printing as a default.*

Policy 1.1.2: *Train all employees in the use of imaging databases (Alchemy, Hansen, and other programs) to avoid printing documents whenever possible.*

Policy 1.1.3: *Managers, supervisors, and staff should be encouraged to submit work through e-mail, when acceptable, to avoid unnecessary printing.*

Policy 1.1.4: *Every attempt should be made to share printed copies of documents (agendas, minutes, and reports) prior to printing a new copy.*

Policy 1.1.5: *Editing and correcting reports and other work product should be done online, when possible.*

Policy 1.1.6: *Make computer files, not paper files, whenever possible.*

Policy 1.1.7: *Reuse printed documents as scratch paper when possible.*

¹² <http://www.asyousow.org/sustainability/paper.shtml>

¹³ www.greenpdf.com

Objective 1.2: Increase paper conservation within the Planning Department.

Policy 1.2.1: All paper purchased for daily use should contain a minimum 50% post-consumer recycled content, and should contain the Green Seal Certification.

Policy 1.2.2: Before purchasing a new copy machine, printer, fax machine, or other electronic device, the department should make every effort to research and buy machines that have the ability to print dual sided.

Policy 1.2.3: A monitoring system for tracking and reporting the paper conservation efforts of the Planning Department should be implemented.

Policy 1.2.4: Ask customers to bring one set of paper plans and a second set of plans on disk in PDF format.

Policy 1.2.5: The Planning Department should look into purchasing software to monitor printing and paper consumption.

Policy 1.2.6: Report and share results with employees, other city departments, and organizations to encourage sustainable behaviors.

Policy 1.2.7: Be proactive in the research and implementation of new technologies when practical.

Action #2 – Energy Consumption (DSC)

The Development Services Center (for Fiscal Year 2006) used 887,497 KWh of power at a cost of \$92,659.55. The Development Services Center includes staff from the Planning & Development Department, the Building and Safety Department, the Public Works Department, and the Department of Fire Services. Each department contributes to the overall electricity use for the DSC.

Current office policies and procedures do not encourage power conservation. Employees leave computers running at night and over weekends. The use of personal space heaters, fans, clock/radios, phone chargers, and other small appliances creates power inefficiency in the office. Work areas that offer natural light are not taken advantage of and lighting in the DSC is often left on even when employees are out of work areas for extended periods of time.

Benefits of reducing energy consumption:

Home, school, office, and industrial environments have all benefited from cost-saving and energy-saving innovations. The advantages of energy conservation have been quantified on the local level in terms of tons of air-pollutants avoided and dollars saved. Global green house gas emissions reductions are also quantified with the benefit of reducing the warming affect ¹⁴ (EPA). If the employees in the DSC reduced energy consumption by 10% in one year (88,750 KW); the production of 1,236,793 lbs of CO₂, a key greenhouse gas would be eliminated. That is the same as removing 121 cars from the road for one year, providing 72 households with electricity for one year, or planting 14,385 seedlings and letting them grow for 10 years!¹⁵

Goal 1: Planning & Development Department will reduce energy consumption by 10%.

Objective 1.1: Change workplace habits to improve energy efficiency.

Policy 1.1.1: Set office thermostats at recommended temperatures for efficiency and limit employee access.

Policy 1.1.2: Limit the number of personal devices allowed in work areas.

Policy 1.1.3: Turn off computers and other electronic devices each night, over weekends, and while gone for extended periods of time (vacations); unless directed otherwise by a supervisor or the IT department.

Policy 1.1.4: Turn off monitors, electrical appliances, and other devices when leaving work area for more than FIVE minutes at a time to conserve electricity.

¹⁴ http://www.epa.gov/greenkit/q5_energ.htm

¹⁵ <http://www.usctcgateway.net/tool/>

Objective 1.2: Improve energy efficiency of the physical building.

Policy 1.2.1: Install ceiling fans and other low cost options to circulate air.

Policy 1.2.2: Install motion detectors or light sensors in all workspaces, including conference and break rooms.

Policy 1.2.3: Purchase lamps or other lighting fixtures for work spaces instead of using unnecessary or excessive over head lighting.

Policy 1.2.4: Limit the purchase of future computers, appliance, and other devices for the DSC to Energy Star certified or higher rated items.

Policy 1.2.5: Be proactive in the research and implementation of new technologies when practical.

Policy 1.2.6: Implement a monitoring system for tracking and reporting the progress of the Planning Department.

Policy 1.2.7: Produce a semi-annual report of performance measures to share results with employees, other city departments, and organizations to encourage sustainable behaviors.

Action #3 – Recycling (DSC)

The city is limited in its ability to track recycling efficiency. Neither the city of Las Vegas nor Republic Services currently tracks the amount of waste generated by a particular building or the city as a whole. To understand recycling habits among Planning & Development Department employees, a survey was conducted. The results indicate that, among Planning employees, 97.6% are willing to participate in a recycling program. However, more than 87% felt that the current program is “poor or fair.” Interestingly, employees are more willing to recycle at work than at home. Some employees cited confusing programs in their home jurisdiction or the lack of recycling bins as a reason why. When asked what employees were most willing to recycle, three of the top four responses were: (1) paper (white/colored), (2) plastic bottles, (3) phone books, & (4) newspaper or magazines.

Recycling inefficiency/low recycling - reuse rates:

The city provides recycling centers within the DSC; however the number and location of recycling centers is not sufficient to encourage recycling among employees. The number one request from those surveyed was that individual recycling bins be more accessible in work areas. Convenience was the number one reason employees were currently not recycling. Additional problems reported by employees are a lack of clear recycling policy (what is recyclable), locating larger recycling centers in the DSC, and having bins emptied on a routine basis. Finally, employees also stated that more promotional material would be helpful in reminding them to recycle.

Benefits of recycling:

*There are many benefits to recycling. **Aluminum** - Americans throw away about 35 billion aluminum cans every year. If all these cans were recycled, we would save an amount of energy equivalent to 150 Exxon Valdez oil spills annually.¹⁶ The aluminum beverage can returns to the grocer's shelf as a new, filled can in as little as 90 days after collection, re-melting, rolling, manufacturing and distribution. Consumers could purchase the same recycled aluminum can from a grocer's shelf every 13 weeks or four times a year.¹⁷ **Glass** - Recycling one ton of glass saves the equivalent of 10 gallons of oil.¹⁸ Most bottles and jars contain at least 25% recycled glass. Glass never wears out and it can be recycled forever.¹⁹ **Paper** - Americans discard 4 million tons of office paper every year. That's enough to build a 12 foot-high wall of paper from New York to California.²⁰ The EPA has found that making paper from recycled materials results in 74% less air pollution and 35% less water pollution. This means that every ton of recycled paper keeps almost 60 pounds of pollutants out of the atmosphere that would have been produced if the paper had been manufactured from virgin resources.²¹ **Plastic** - Plastics are the fastest*

¹⁶ (State of California Department of Health Services, Toxic Substances Control Program. Handbook from the Toxic Substances Control Program.) <http://www.bringrecycling.org/benefits.html>

¹⁷ (Can Manufacturers Institute 1993. The Great Aluminum Can Roundup.) <http://www.bringrecycling.org/benefits.html>

¹⁸ (Indiana Department of Education, 1992. Waste Reduction Guide.) <http://www.bringrecycling.org/benefits.html>

¹⁹ (EarthWorks Group. 1990. The Recycler's Handbook. Berkeley, CA: The EarthWorks Press.)
<http://www.bringrecycling.org/benefits.html>

²⁰ (EarthWorks Group. 1990. The Recycler's Handbook. Berkeley, CA: The EarthWorks Press.)
<http://www.bringrecycling.org/benefits.html>

²¹ (Paper Stock Institute. 1990. "Why Recycle Paper?" Recycling Paper.) <http://www.bringrecycling.org/benefits.html>

growing share of the US wastestream, accounting for 5% of household throwaways. Every American uses almost 200 pounds of plastic in a year — 60 pounds of it for packaging.²² Plastics are part of the wastestream. Although they account for only 8% of the waste by weight, they occupy about 20% of the volume in a landfill due to their low bulk density.²³

Goal 1: Planning & Development Department will improve its recycling efficiency.

Objective 1.1: Make it easy for employees to recycle.

Policy 1.1.1: Create additional “recycling centers” in the DSC. Add additional containers to existing and new spaces and find a more effective way to swap out or empty containers that are full.

Policy 1.1.2: Purchase or supply recycling containers for individual work stations or smaller work areas. This may include paper boxes for paper recycling and purchasing new ‘blue’ containers for glass and plastic bottle recycling.

Policy 1.1.3: Create labels and signs for every recycling area. Clearly label each container, and place an “acceptable” recyclable items sign above each space.

Policy 1.1.4: Create signs and posters for cubicles, break rooms, and hallways that promote recycling, advertise the benefits from increased participation and serve as reminders.

Policy 1.1.5: Purchase paper with recycled content, cleaning chemicals that are environmentally friendly, and use or buy items that promote sustainability, when cost feasible.

Policy 1.1.6: Purchase and use “re-usable” items when possible. Buy re-usable ink & toner cartridges.

Policy 1.1.7: Implement a monitoring system for tracking and reporting the progress of the Planning Department’s recycling efforts.

Policy 1.1.8: Report and share results with employees, other city departments, and organizations to encourage sustainable behaviors.

²² (San Diego County Office of Education 1991. RAYS – Recycle and You Save.) <http://www.bringrecycling.org/benefits.html>

²³ (Exxon Chemical Company. May 15, 1992. Chemtalk.) <http://www.bringrecycling.org/benefits.html>

Action 4 – Mileage & Vehicles Efficiency (DSC)

Planning & Development Department is assigned several cars & trucks to conduct its business. Currently, the department has a large variety of vehicles, some efficient and some inefficient. Below is a comparison of the larger trucks in the department's fleet and more efficient hybrid vehicles. Logs from the department and fleet services were used to compile accurate mileage and fuel economy data for the following two vehicles for the May 06 – April 07 time period. Monthly mileage and gasoline usage was averaged for this time period.

Vehicle # 2824 (2000 Ford Expedition):

580 mi/month using 45.46 gallons of gas (12.75 mi/gal)

Emitting approximately 26,500 lbs of CO₂ per year (based on 15,000 mi/yr).

Vehicle # 2592 (1998 Chevrolet S10 Pickup 2WD):

954 mi/month using 50.45 gallons of gas (18.9 mi/gal)

Emitting approximately 19,850 lbs of CO₂ per year (based on 15,000 mi/yr).

NOTE: An Expedition with 5 occupants is more efficient than an S10 with a single driver. Policy 1.1.4 mentions trip sharing.

The S10 pickup ran 6 miles/gal better than the Expedition, accumulating almost double the mileage while using about the same amount of gasoline. While the pickup is more efficient than the SUV, if the Planning & Development Department was assigned hybrids instead of the larger trucks, the gasoline consumption and greenhouse gas emissions would be significantly reduced.

Hybrid analysis:

2007 Toyota Prius

The Toyota Prius averages: 60 city mi/gal., 51 Hwy mi/gal. = averages 55mi/gal. emitting approximately 8,800 lbs of CO₂/year based on 15,000 miles per year.

Comparing the Ford Expedition (used):

Yearly mileage = 6959

Yearly gas = 545.6 gallons

The city could have saved 430 gallons of gas and stopped the emission of 17,630 lbs of CO₂ if a Prius hybrid vehicle were used instead of the Expedition.

Toyota Prius (could have used):

6959

115.98 gallons (est. fuel economy)

Comparing the 1998 S-10 Pickup (used):

Yearly mileage = 11,450

Yearly gas = 605.4

The city could have saved 397.22 gallons of gas and stopped the emission of 11,000 lbs of CO₂ had the Prius been used instead of the truck.

Toyota Prius (could have used):

11,450

208.18 gallons (est. fuel economy)

Goal 1: Planning & Development expands its use of hybrid automobiles and fuel efficient vehicles.

Objective 1.1: Trade-in oversized and inefficient vehicles for more efficient models.

Policy 1.1.1: Before requesting a new car or truck, the department will evaluate department needs and convey its desire to receive fuel efficient vehicles.

Policy 1.1.2: Establish a monitoring system for tracking the progress of the Planning Department in the reduction of mileage and the increase in fuel economy.

Policy 1.1.3: Report and share results with employees and other city departments to encourage sustainable behaviors.

Policy 1.1.4: Limit or share trips in vehicles to conserve fuel and mileage.

Policy 1.1.5: Be proactive in the research and implementation of new technologies when practical.

Policy 1.1.6 Use the most fuel efficient vehicle first.

Action #5 – Club Ride (Planning and Development)

*Traffic congestion, air quality and the daily commute are growing issues for Southern Nevadans. City employees can help to improve the air and traffic conditions by choosing alternative transportation for commuting. Carpooling, biking, walking or using public transit just four times a month helps keep our air crystal clear and our traffic moving smoothly. The Club Ride program is offered through the Regional Transportation Commission (RTC) in cooperation with the city. To be a member of the Club Ride program, a participant only needs to use an alternative method of transportation four times per month.*²⁴

Club Ride participation rates:

*Currently, less than five percent of Planning & Development employees participate in the Club Ride program. Participation rates in the Club Ride program may be impacted by the city's alternative work schedule, which 47% percentage of employees participate in.*²⁵

Benefits of Club Ride:

*The benefits to the Club Ride program include: saving money spent on gasoline or other fuels, less wear and tear on personal vehicles, help improve air quality and traffic congestion and enjoying a less stressful commute. The RTC offers incentives for participation such as preferential parking, monthly drawings for prizes, emergency rides home, and nominations for the Commuter of the Month. A potential benefit from increased participation is the reduction of demand for parking spaces in the Development Services Center (DSC) parking lot, which is often full.*²⁶

Goal 1: Planning & Development will encourage participation in the Club Ride program, and increase participation to 10% of Planning & Development employees.

Objective 1.1: Reduce greenhouse gas emissions by increasing the amount of carpooling.

Policy 1.1.1: Survey employees to see if employees are willing to participate in the program.

Policy 1.1.2: Simplify the process by providing willing employees with names of other employees in their area.

Policy 1.1.3: Define carpooling days – such as Tuesday, Wednesday, and Thursday; when the lot is typically full and most employees are at work.

Policy 1.1.4: If possible, make arrangement so that willing employees work the same hours on carpooling days.

Policy 1.1.5: Create more “Club Ride” designated parking spaces in the DSC lot as enrollment in the program increases.

²⁴ <http://www.rtcsonthernnevada.com/tdm/clubride.htm>

²⁵ Survey of P&D employees, sent May 22, 2007

²⁶ <http://www.rtcsonthernnevada.com/tdm/clubride.htm>

Implementation Plan – Step for Starting:

1. *Increase the CELEBRATE committee to include a more diverse representation of job categories within the department (staff that routinely orders supplies).*
2. *The committee should review and propose policy changes as soon as possible.*
3. *The committee should begin an advertising campaign and inform employees on a regular basis of improvements (include a graphics staff person).*
4. *Try using multiple approaches: posters, e-mails, and other types of activities to reach all employees.*
5. *Create opportunities for employee participation, whether serving on the committee or submitting interesting articles on conservation.*
6. *Encourage employees to start recycling at home. Teach family, friends, and neighbors about the benefits for recycling. (Pass it on...)*
7. *Set a time frame for measuring progress, successes, and make sure to report along the way.*
8. *Create a competition for recycled paper box decoration – establish guidelines that all decorations must be appropriate for work, environmentally friendly, and should promote recycling (be creative). Using “Trick My Trash” as a division decorating contest – between current, comprehensive, and administration.*

References

- 1.) *Production of CO₂ in the Industrial Process*
www.gwi-nc.org and www.greenpdf.com
- 2.) *Conversion from current supply 0% post-consumer to 50% post-consumer copy paper*
www.environmentaldefense.org/papercalculator/select.cfm
- 3.) *Weight measure conversion*
www.easysurf.cc/cnver3.hrm#mtp2
- 4.) *Greenhouse Gas Equivalencies Calculator:*
<http://www.usctcgateway.gov/tool/>
- 5.) *California Integrated Waste Management Board*
www.ciwmb.ca.gov/bizwaste/default.htm
- 6.) *Corporate Express Website*
<http://www.eway.com/ce/eway/enter?ps=n>
- 7.) *As You Saw*
www.asyousaw.org/sustainability/paper.shtml
- 8.) *Global Warming Initiative*
“The Green PDF: Reducing Greenhouse Gas Emissions One Ream at a Time”
<http://www.greenpdf.com/graphics/TheGreenPDFRevolution.pdf>
- 9.) *EPA: Green Communities – Energy Conservation Action Plan*
http://www.epa.gov/greenkit/q5_energ.htm
- 10.) *BRING Recycling*
<http://www.bringrecycling.org/benefits.html>
- 11.) *Regional Transportation Commission of Southern Nevada (RTC)*
<http://rtcsonthernnevada.com>
- 12.) *The following City of Las Vegas departments provided support:*

<i>Finance & Business Services</i>	<i>Field Operations</i>
<i>Building & Safety</i>	<i>Leisure Services</i>
<i>City Manager’s Office</i>	<i>Information Technologies</i>